

## CLAIMS

1-7. (Cancelled)

8. (Previously presented) A method of mediating an immune response, comprising the step of administering attenuated T-cell lines to a human, wherein human T-cells are cultured in the presence of whole bovine myelin proteins or synthetic human myelin proteins and prepared by selecting and expanding human T-cell lines that respond to a plurality of different myelin proteins and wherein the administered attenuated T-cell lines target more than one myelin protein and wherein said human is in need of treatment for multiple sclerosis.

9. (Original) The method of claim 8, wherein the T-cells are derived from autologous peripheral mononuclear cells.

10. (Cancelled)

11. (Cancelled)

12. (Original) The method of claim 8, wherein the attenuated T-cells are attenuated by irradiation.

13. (Cancelled)

14. (Original) The method of claim 8, wherein the T-cells are administered subcutaneously.

15. (Original) The method of claim 8, wherein the T-cells are administered in 4 to 6 week intervals.

16. (Original) The method of claim 8, wherein the T-cells are administered for approximately 18 months.

17. (Original) The method of claim 8, wherein the T-cells are administered in a first dosage of  $30 \times 10^6$  to  $80 \times 10^6$  attenuated T-cells.

18. (Original) The method of claim 17, further comprising more than one administered dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up to the point of adverse reactions.

19. (Original) The method of claim 17, further comprising more than one

administered dosage, wherein later dosages are increased if there is no clinical response to the first dosage, up to the point of clinical response.

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Previously amended) The method of claim 8, wherein said attenuated T-cells are reactive to a plurality of different myelin proteins.

24. (Cancelled)

25. (Cancelled)

26. (Previously presented) The method of claim 23, wherein said plurality of different myelin proteins are bovine myelin proteins.

27. (Cancelled)

28. (Previously presented) The method of claim 23, wherein said plurality of different myelin proteins are synthetic human myelin proteins.

29. (Cancelled)

30. (CURRENTLY AMENDED) A method for treating secondary progressive multiple sclerosis in a human in need of treatment for secondary progressive multiple sclerosis, comprising the step of administering attenuated ~~T-cells~~ PBMCs to the human, wherein  $40 \times 10^6$  attenuated ~~T-cells~~ PBMCs are injected subcutaneously at intervals of either 3 months or 6 weeks for 3 months followed by 3 month intervals, wherein said attenuated ~~T-cells~~ PBMCs are prepared by a second method comprising the steps of:

a) obtaining peripheral blood mononuclear cells (PBMCs) from a human;

b) culturing said PBMCs in serum free media supplemented with gentamicin;

and stimulating said PBMCs in the presence of whole bovine myelin proteins;

c) expanding said PBMCs using recombinant human IL-2 at a concentration of 50U/ml;

d) restimulating after 10-14 days using autologous irradiated PBMCs as antigen presenting cells and bovine myelin proteins;

e) repeating steps c and d weekly until selecting a polyclonal subset of ~~T-cells~~ PBMCs

wherein said polyclonal subset of ~~T-cells~~ PBMCs are reactive to at least two different myelin proteins as detected in a proliferation assay and response to myelin antigens exceeds response to control antigens by threefold; and

f) combining said polyclonal subset of ~~T-cells~~ PBMCs with phosphate buffered saline (PBS), thereby producing the attenuated ~~T-cells~~ PBMCs for administering to the human, ~~wherein upon administering the attenuated T cells the number of aberrant autoimmune T cells is reduced in said human.~~